SECTION 4 Description of Operation

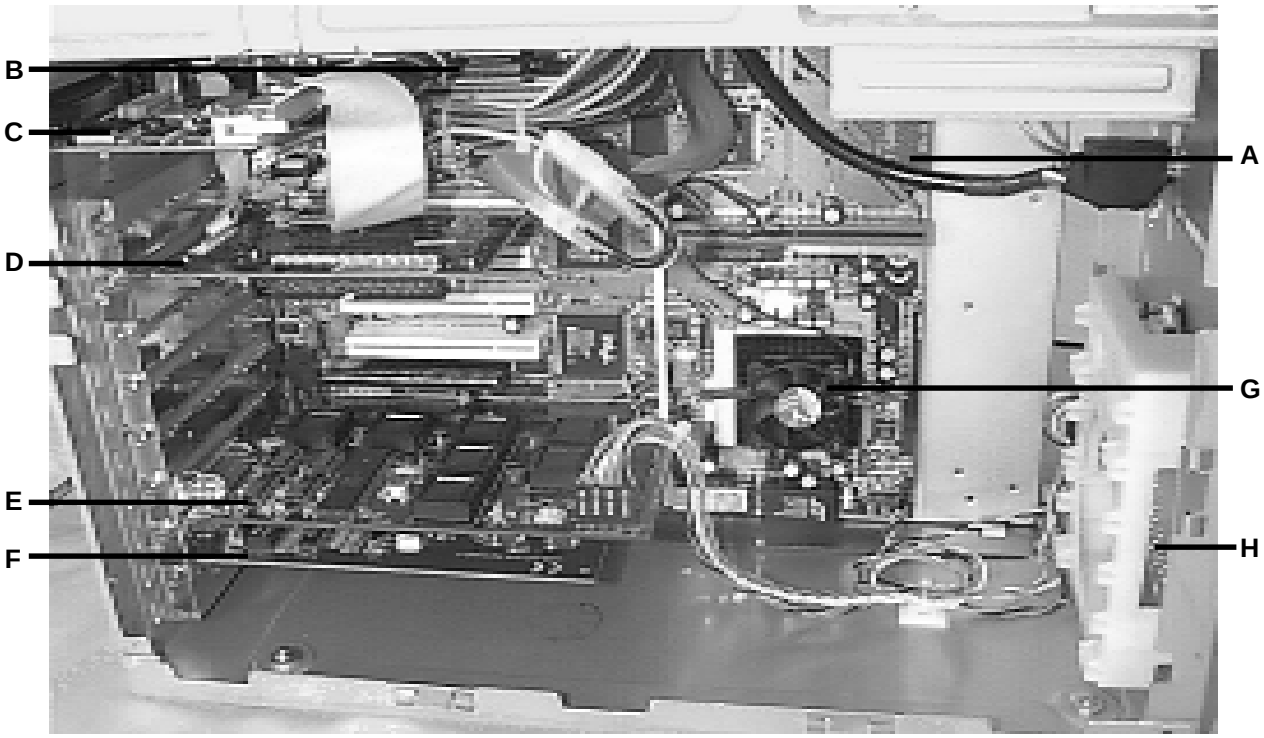
Contents

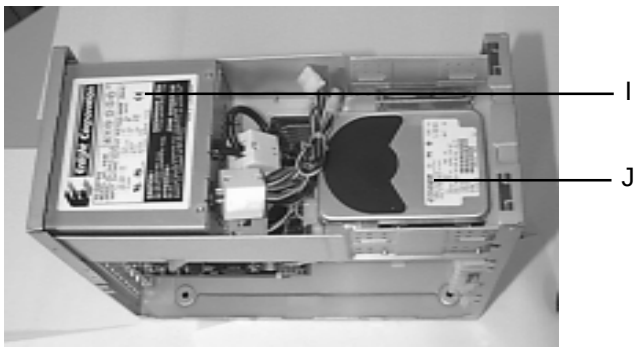
1. Internal Component Identification 1

2. Internal Connection Identification 3

DESCRIPTION OF OPERATION

1. INTERNAL COMPONENT IDENTIFICATION





A Mother Board
B RAM and RAM Expansion Slots
C Parallel Card
D SCSI PCB
E Output Interface PCB (OIF PCB)
F Ethernet PCB
G Processor and Fan
H Speaker
I Power Supply Unit (PSU)
J Hard Disk Drive (HDD)

A Mother Board

This has the same function as the Mother Board (or System Board) in a PC. However the Mother Board is specially configured to work with the components in the SC7500. All other components are connected via the Mother Board.

B RAM and RAM Expansion Slots

RAM chips are installed at the factory to a value of 16MB (2 x 8MB) for all SC7500 models.

Two free expansion slots are provided for extra RAM chips to be added if required. Additional chips must be added in a pair.

C Parallel card (Bidirectional)

For standard Parallel communication. Transfers parallel data between Parallel cable and Mother Board.

D SCSI PCB

Used during scan operation. Connected via PCI slot to Mother Board. Transfers scanning commands to Mother Board from the computer and transfers status and scan data from Mother Board to the computer via SCSI connection.

E Output Interface PCB (OIF PCB)

For communication between the SC7500 and the RISOGRAPH. The OIF PCB is a specially designed interface card for use with RISOGRAPH interface technology.

Scan data, print data commands and status are all transferred via the OIF PCB to the Mother Board using an ISA slot.

F Ethernet PCB

For connection to a network or Macintosh.

Transfers TCP/IP or EtherTalk data from the Ethernet connection to the Mother Board via the ISA slot.

G Processor and Fan

The processor manages the flow and processing of all data via the Mother Board. The processor has a dedicated cooling fan.

H Speaker

The speaker is used to sound an audio signal during initialisation while in non-print test mode or in the case of an error. The number of pulses in the signal depends upon the situation or error. For a list of audible codes see Section 6 Troubleshooting

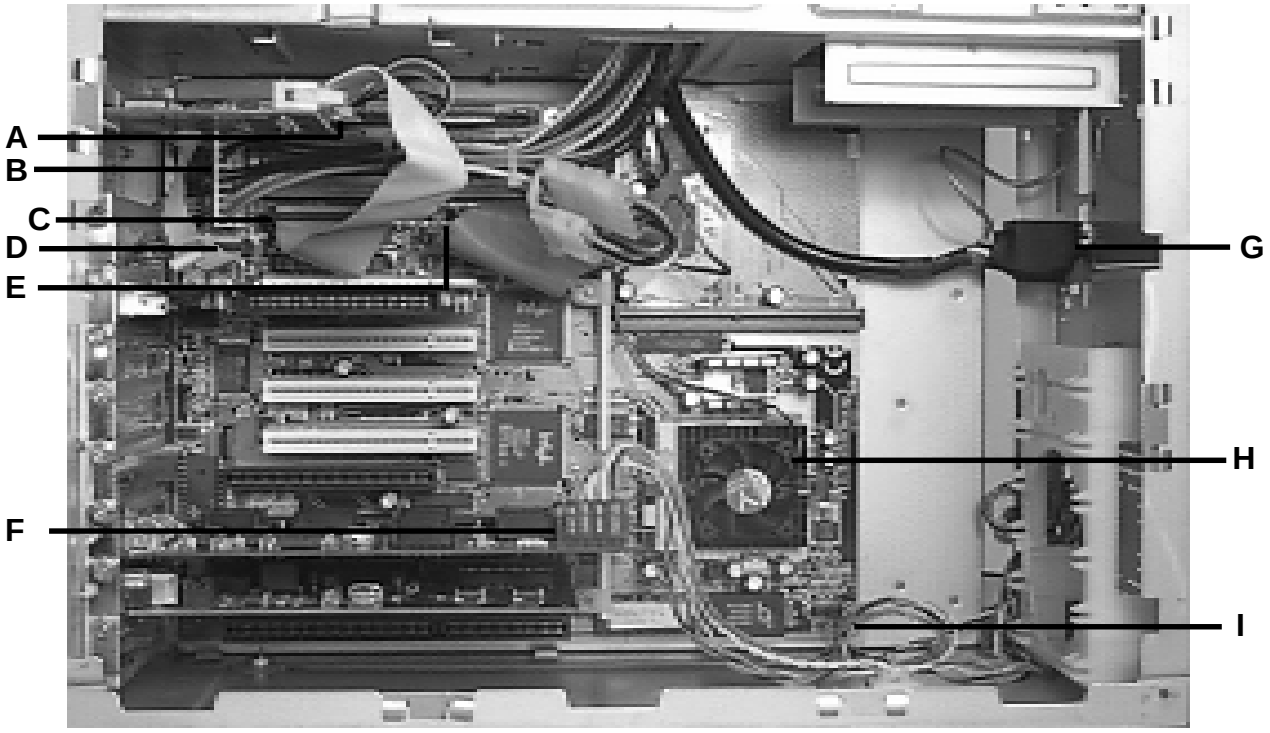
I Power Supply Unit (PSU)

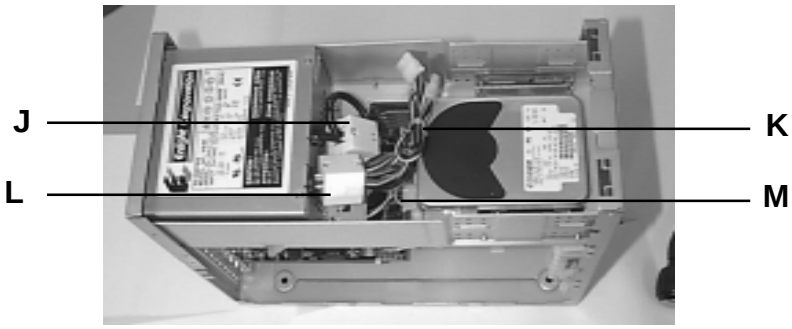
Transfers the input power voltage and AC current into 12 V and 5 V DC. For use by all of the components in the SC7500.

J Hard Disk Drive (HDD)

The hard disk is used to store the system software of the SC7500 as well as the resident fonts and any fonts downloaded to the hard disk by the user from a computer.

2. INTERNAL CONNECTION IDENTIFICATION





A Parallel PCB power connection from Power Supply (at rear of data connection).

B Power inputs to Mother Board from Power Supply (lower connector with orange colour cable).

C Parallel PCB data connection to Mother Board

D Serial communication connection from Serial connector to Mother Board.

E IDE connection from Mother Board to internal hard disk (connected to primary IDE connector).

F Connection from OIF to front panel reset key and LEDs.

G ON/OFF switch connection from front panel to power supply.

H Fan power supply.

I Connection to speaker from Mother Board.

J Power supply output connection.

K Hard disk IDE connection to Mother Board.

L Power supply output connection.

M Hard disk power input connection from power supply.